

From boatanchors@theporch.com Fri Apr 21 11:04:20 1995
Date: Fri, 21 Apr 1995 09:36:30 -0500
Message-Id: <199504211431.KAA07902@cc01du.unity.ncsu.edu>
From: rdkeys@unity.ncsu.edu
Subject: Re:

>
> >Be that as it may, mildew formation is caused by condensing moisture rather
> >than temperature or humidity though both play a part. The key is that unless
> >something is left out in the rain, a slight increase in temperature over
> >ambient (very slight) will prevent dew formation. In my yout in S. Florida
> >(moved 150 miles north to reach Orlando) a single 25-40 watt light bulb
> >burning at night was sufficient for a tin toolshed. I suspect that a pilot
> >light, would do the same for a BA.
> >
> >Would be more efficient than a resistor as well since the
> >radiation/convection from glass is better than plastic.
> > Would just derate it for long life.
>
> Agreed. I use those small 4 and 7.5 watt nightlight bulbs under the chassis
> of some of my rigs. Besides not getting warm enough to do any harm to
> anything, they provide a nice permanent glow in the dark to add to the glow
> of filaments when things are lit off.. RS has inexpensive sockets to fit
> the nightlight bulbs.
>
> 73! - Mark, NE9G

Sounds like the saga of the ballast resistor revisited. Also it is common
practic in marine receivers (boatanchor varieties) to have a small filament
string dropping resistor [read ballast resistor] to finish off the 115vdc
drop to a 90 volt or so filament string. That allows to keep the chassis
slightly warmer than ambient and makes for keeping it nice and dry.

Those small nightlight bulbs or christmas tree bulbs are ideal for such
usage, and are also good as experimental voltage dividers and general
current limiters for boatanchor use.

73/Bob/NA4G

From boatanchors@theporch.com Fri Apr 21 12:18:19 1995
Date: Fri, 21 Apr 1995 10:51:24 -0500
Message-Id: <Pine.3.89.9504210955.A269-01000000@mm1001.theporch.com>
From: Kevin J Pease <kevin@mm1001.theporch.com>
Subject: RE:AM WINDOWS

The problem with 160 meters is the needed antenna height. My antenna is a

60 feet which seems to be limiting. I run a Ranger on 160 which only puts out 50 watts of carrier. That power level on AM demands a very good antenna. Also most HAM's don't have the room to put up a GOOD EFFICIENT 160 meter antenna. Overall at night 80 meters is the best option. However the interference level makes the band miserable to use. I guess WE boatanchor types need to go back to CW in order to enjoy our old BA equipment.

Kevin J Pease
WB0JZG Mt Juliet, TN.
mm1001.theporch.com

From boatanchors@theporch.com Fri Apr 21 09:19:06 1995
Date: Fri, 21 Apr 1995 07:50:39 -0500
Message-Id: <Chameleon.4.00.4.950421074522.grant@NQ5T>
From: gyoungma@gtetel.com
Subject: Re: Another D104 question

>> BAers,
>>
>> Anyone know what the output impedance is of a D104 with internal amplifier,
>> and one without?
>>
> I have a amplified D-104 with the T-UG8 stand. The microphone element has
> three leads coming from it, apparently two for the balanced output and one
> for ground, as the ground is tied to one of the other two, circuit wise. It
> is apparently low/medium impedance (haven't verified that yet) and is fed
> into the preamp located in the base.
>
> The preamp seems to have a fairly low output impedance, which allows it to
> drive modern low-impedance mic inputs as well as BA-style hi-Z inputs
> without problems. It's serving as a more or less constant voltage source
> independent of load (within reason). If I have time to fiddle this weekend
> I'll measure the output impedance of the preamp.
>
> 73! - Mark, NE9G
>
>

The issue is less the impedance of the D-104 element, than it is what the element must look into in order to express its full, undistorted frequency response. The element is high impedance. According to the Astatic spec sheet the element must look into a load of at least 500K. Even at that load impedance, the bass response rolls off very steeply. The mic will have an extremely peaked high frequency response and sound like CR*P

(IMHO).

A D-104 sounds best (the element, that is) if it looks into at least 1 Meg, and many users like to see 2-5

Meg. Translated, if you drive an unisolated (unamplified) D-104 into a modern rice box with a 600 ohm input impedance it will sound AWFUL.

The D-104 preamp (most common version) is a two transistor job, with an emitter follower input stage driving a pretty standard voltage amplifier output stage. There is enough output available from the preamp to drive a modern rig with 600 ohm input impedance or a BA with the usual high impedance input stage (2-5 Meg grid leak resistor). The unamplified element will sound just fine on a typical BA. On a rice box, better use the preamp

Grant - NQ5T

Grant H. Youngman -- NQ5T
formerly - K5VCM, W0JXE, KH6HHC, WB4BBD

gyoungma@gtetel.com
72567.2670@compuserve.com

From boatanchors@theporch.com Fri Apr 21 09:39:56 1995
Date: Fri, 21 Apr 1995 08:12:11 -0500
Message-Id: <01HPLDU63SW2A26CA3@RANDB.PPRD.Abbott.Com>
From: KANAMAA%AMGATE%MATRXA@randb.abbott.com
Subject: Ballast help needed

>From: Kana, Michael (D9CY)
Date: Fri, Apr 21, 1995 8:13 AM
Subject: Ballast help needed
To: bigboats
Hello all

I need an Amperite 3-4 Ballast tube spare. Is there a chance of making a copy out of discrete components similar to those made for the R390A?

73's de AA9IL
Mike Kana

From boatanchors@theporch.com Fri Apr 21 10:31:34 1995
Date: Fri, 21 Apr 1995 09:04:16 -0500
Message-Id: <Pine.LNX.3.91.950421075603.11999D-100000@thelair.zynet.com>
From: johnb@thelair.zynet.com
Subject: Re: Ballast help needed

Mike, aren't they still in business? seems to me that I saw
an ad from them in ER some months/years back, for ballast devices from
them.

/john

On Fri, 21 Apr 1995 KANAMAA%AMGATE%MATRXA@randb.abbott.com wrote:

> From: Kana, Michael (D9CY)
> Date: Fri, Apr 21, 1995 8:13 AM
> Subject: Ballast help needed
> To: bigboats
> Hello all
>
> I need an Amperite 3-4 Ballast tube spare. Is there a chance of making
> a copy out of discrete components similar to those made for the
> R390A?
>
> 73's de AA9IL
> Mike Kana
>

John M. Brewer wb5oau
johnb@thelair.zynet.com

From boatanchors@theporch.com Fri Apr 21 10:42:47 1995
Date: Fri, 21 Apr 1995 09:15:47 -0500
Message-Id: <Pine.SUN.3.91.950421101133.26536B-100000@wabash.iac.net>
From: Bill Strangfeld <bstrang@iac.net>
Subject: Re: Ballast help needed

x3fnzsvt3blH1FJYq0hqvlJzKvzv01rWzqPv98F+ZluuskNFPN1aTjb05m87
eijU7j2sQrlwTTdX8VrG7/httA==

From boatanchors@theporch.com Fri Apr 21 10:56:17 1995

Date: Fri, 21 Apr 1995 09:29:17 -0500
Message-Id: <199504211426.KAA07778@cc01du.unity.ncsu.edu>
From: rdkeys@unity.ncsu.edu
Subject: Re: Ballast help needed

>
> From: Kana, Michael (D9CY)
> Date: Fri, Apr 21, 1995 8:13 AM
> Subject: Ballast help needed
> To: bigboats
> Hello all
>
> I need an Amperite 3-4 Ballast tube spare. Is there a chance of making
> a copy out of discrete components similar to those made for the
> R390A?
>
> 73's de AA9IL
> Mike Kana
>
>

If I were doing that, I would look at the current and the voltage drop
across the ballast tube and compute the resistance required to match that.

You could 1) devise a standard resistor set to match.

2) devise a lamp filamentary resistance to match.

3) wind your own resistance wire resistance to match.

All the ballast tube is is a series current limiting resistor.
How you get there is irrelevant. Ohm's law is Ohm's law.

Getting a home brewed one to fit into tight places may take some
head scratching.

73/Bob/NA4G

p.s. folks can get into religious wars on this particular topic it seems.

From boatanchors@theporch.com Fri Apr 21 11:30:50 1995
Date: Fri, 21 Apr 1995 10:03:56 -0500
Message-Id: <93221@w5ddl.aara.org>
From: n5off@w5ddl.aara.org
Subject: Ballast Tube Fix

I may have missed part of the ballast tube thread.

On the R-390A anyway, the ballast tube may be bypassed like this.

1. Jump the filament pins on the ballast tube.
- B. Replace the 6BA6's in the PT0 with 12BA6's.

The 12V tubes will eat the equiv voltage drop of the ballast tube and the 6 volt tubes, all in series.

I did this several months ago on mine, and the world is still turning.

73 de tom

"Who you gonna believe, me or your own eyes?" Chico Marx

From boatanchors@theporch.com Fri Apr 21 11:44:11 1995
Date: Fri, 21 Apr 1995 10:17:17 -0500
Message-Id: <2C7C7D4E58@s1.xetron.com>
From: "Jack Giehl" <JACKG@s1.xetron.com>
Subject: Re: Ballast Tube Fix

Dear BA enthusiasts:

Regarding Tom's comment on eliminating the R390A ballast tube, make sure that you change BOTH 6BA6 tubes, ie, the PT0 and BF0 oscillator tubes to a 12BA6.

Jack

73,

=====
Jack, WB8BFS
jackg@xetron.com Loveland, Ohio (near Cincinnati)
"Peak the grid, dip the plate, and keep the fire in the wire."
=====

From boatanchors@theporch.com Fri Apr 21 16:56:58 1995
Date: Fri, 21 Apr 1995 15:30:12 -0500
Message-Id: <950421202249_71333.144_DHQ69-1@CompuServe.COM>
From: don merz <71333.144@compuserve.com>
Subject: CQ Jim Allen

Jim Allen: Lost your phone number. Palco is model Bantam 65-A so Hi Manuals manual should work. Also, Modulator is model 35-A, whatever that means.
Let me know....
Don

From boatanchors@theporch.com Fri Apr 21 11:12:55 1995
Date: Fri, 21 Apr 1995 09:46:02 -0500
Message-Id: <199504211443.KAA08770@cc01du.unity.ncsu.edu>
From: rdkeys@unity.ncsu.edu
Subject: CWIST Friday Night Fist Function

Tis time again, fer all youse fine Boatanchorites to dusts offs yer fine glow-in-the-darker filamentous firebottle burners, an' restokes up the ethers with fine sparks and associated emissions.

See you all at midnight EST (0400UTC) on 3702R5 khz!

If any are interested in a QRQ run at 10 pm EST (0200UTC) try the roundtable on 3525+-2khz.

73/Bob/NA4G

From boatanchors@theporch.com Fri Apr 21 11:00:49 1995
Date: Fri, 21 Apr 1995 09:32:38 -0500
Message-Id: <9504211430.AA01613@staples.lbl.gov>
From: staples@staples.lbl.gov (John Staples)
Subject: D104 output impedance

> >
> >Anyone know what the output impedance is of a D104 with internal amplifier,
> >and one without?

Most amplified D-104's take the output off the tap of a 5K variable gain pot, which is driven from a common-emitter amplifier. At maximum output setting, the output impedance is therefore about 5K. There is also usually an electrolytic between the arm of the pot and the output. The electrolytic isolates the 9 volt power supply from the output.

If you connect an amplified D-104 to the input of a high-impedance speech amplifier that itself does not have a d.c. blocking capacitor (it is rare that they do) and the electrolytic in the D-104 is at all leaky, the first stage speech amplifier may be significantly positively biased, which could cause distortion or gain reduction as the plate potential will be pulled down. Check the condition of your amplified D-104 by loading it with a 1 meg resistor and measuring the d.c. voltage across the output with a high impedance (10 meg, e.g.) voltmeter. If you see a positive voltage of more than a few millivolts, replace the electrolytic in the microphone.

The output impedance of an unamplified D-104 looks like a several hundred picofarad capacitor. The bass response of the unamplified D-104 is therefore dependent on the value of the load resistor at the input of the first speech amplifier. The equivalent series capacitance of the D-104 and the

input resistor of the speech amplifier form a high-pass filter, which rolls off the bass response. Typically, a 1 megohm load resistor will give fine results.

The frequency response of amplified and unamplified D-104's is the same: there is more unit variation depending on the life history of the crystal element itself. New elements are available from AES for about \$20. About half the D-104's I buy at fleamarkets need new elements.

..John Staples, W6BM

From boatanchors@theporch.com Fri Apr 21 10:25:22 1995
Date: Fri, 21 Apr 1995 08:58:25 -0500
Message-Id: <Pine.SUN.3.91.950421084452.10889A-1000000@eiger.ceet.niu.edu>
From: Steve Berg <berg@eiger.ceet.niu.edu>
Subject: Re: Evolution of the planar triodes

the planar triodes were developed by G.E. in the late 1950's. I still have 2 of the 7077's and a jetron socket. One of these tubes was used on a space probe as the tx final amp stage. They are neat but very expensive. I think they are in the same league as the 416B in terms of performance. I will eventually get mine up and running. There is a ham note type of letter that details 2 meter and 432 MHz (Megacycles to us thermionic folks) receiving converters.

73,

Steve WA9JML

From boatanchors@theporch.com Fri Apr 21 16:00:34 1995
Date: Fri, 21 Apr 1995 14:33:50 -0500
Message-Id: <d0avwKv0000000000@MHS>
From: RICHARD_HUMPHREY@HP5200.desk.hp.com
Subject: RE: Fair 51J3

> I was just scanning the new Fair Radio catalog for BA receivers
>
> I saw that they had 51J3 receivers for around \$450.00, in
>"Used, checked" condition.
>
> How does this rate as a receiver? And, how good a condition
>would one expect form Fair as "used, checked"?
>
>Lee K. Gleason N5ZMR

>Control-G Consultants
>gleason@mwk.com

Haven't seen the catalog. Does that include a cabinet? Top and bottom covers? Manual? Since it's a 51J3, I assume it doesn't have mechanical filters (optional kit, standard on 51J4, I think)

If they have all the above, plus are in excellent condition, it would be worth it. Otherwise, that's about \$300 high. They seem to be going at the swap meets for \$100 to \$200. I just bought a fixer for \$50. Fair and Tucker are expensive.

Nice radios. Common problems include PTO drift: the endpoint drifts, causing the dial cal to be off. There is an adjustment, but it eventually runs out of range, and then you have to live with the error. It's mechanically complex, although not in the R-390A league. Doesn't use any oddball tubes. No ballast tube! Weighs 'half' what the R-390A does. Very straightforward, WYSIWYG radio. Good performance, but must be aligned on the nose to get it.

I think "used, checked" means they plugged it in and it 'worked' reasonably OK. I've never bought from them, so I don't know for sure.

These don't sound like a real deal to me. I've been looking for a clean one for a while, but \$450 is way over the 'forget-it' point. \$50 and some repairs for a good looking one from another BA list person was more like it!

Richard
N6NAE

From boatanchors@theporch.com Fri Apr 21 15:00:46 1995
Date: Fri, 21 Apr 1995 13:33:45 -0500
Message-Id: <01HPLP3S8U2AA26IG0@RANDB.PPRD.Abbott.Com>
From: KANAMAA%AMGATE%MATRXA@randb.abbott.com
Subject: Fair Radio trivia

>From: Kana, Michael (D9CY)
Date: Fri, Apr 21, 1995 1:35 PM
Subject: Fair Radio trivia
To: boatanchors
Howdy all

One of the earlier posts about Fair mentioned that they used old clip art still. I have one question that pops in my mind everytime I read the catalog... Towards the back, there is a control box of

sorts with the caption: "Make Macy's Phone Patch" I guess there was a conversion article a loooooong time ago that used this unit. Just who the heck is Macy and what is his famous Phone Patch?

BTW, thanks for all the comments and help on the Ballast Tube.

73's de AA9IL
Mike Kana

From boatanchors@theporch.com Fri Apr 21 12:20:16 1995
Date: Fri, 21 Apr 1995 10:52:53 -0500
Message-Id: <Pine.3.89.9504211058.A287-01000000@mm1001.theporch.com>
From: Kevin J Pease <kevin@mm1001.theporch.com>
Subject: Re: Filter vs. Phasing, or - HT-32B vs. HT-37

Kevin J Pease
WB0JZG Mt Juliet, TN.
mm1001.theporch.com

On Wed, 19 Apr 1995, C. Frank Gilmore wrote:

> ..
> There was an ad by a short lived manufacturer who claimed the transmitter
> had the narrowest CW signal on the air! Never could figure what crystal
> ball he pulled that one from.
>

That is actually a vallid claim. However the maximum cw speed was most likely limited. The bandwidth used by a cw signal is related to the keying speed and the keying waveform. A cw transmitter with verry sharp on and off transitions is capable of verry high speed but has a wider bandwidth. To your receiver that will show up a key clicks. A signal with slow on and off transitions (ie a rounded keying waveform) is not capable of as high a speed and will have narrower bandwidth *ie less keyclick. If you ever listen to cw on a truely narrow receiver 100 hz or less with verry sharp skirts you will here the effect that I am refering to. For most ameature use a rounded waveform is prefered since most ameatures cant operate over about 20 wpm. The softer keying will generate a narrower signal but at over 20 wpm will begin to run together and be hard to copy. So the refrence to badnwidth of a CW signal is infact relivant.

From boatanchors@theporch.com Fri Apr 21 13:04:24 1995
Date: Fri, 21 Apr 1995 11:37:29 -0500
Message-Id: <950421.092433.PDT.ISSRZL@uccvma.ucop.edu>
From: Richard Links <ISSRZL@UCCVMA.UCOP.EDU>
Subject: For sale: RME DB-20 SW Converter

I have a partially restored RME DB-20 SW converter for sale. This unit has been restored on the exterior only and is in nice, attractive condition. It is apparently in original electronic condition, however and has not been tested. The unit appears to be approximately of late 1930's or early 1940's vintage. Gray paint with white nomenclature on exterior.

I am asking \$75 or b/o.

Thanks

From boatanchors@theporch.com Fri Apr 21 13:15:51 1995
Date: Fri, 21 Apr 1995 11:49:12 -0500
Message-Id: <Pine.3.89.9504211130.A7386-0100000@indy2>
From: "Roberta J. Barmore" <rbarmore@indynet.indy.net>
Subject: Re: For sale: RME DB-20 SW Converter

Hi!

On Fri, 21 Apr 1995, Richard Links wrote:

> I have a partially restored RME DB-20 SW converter for sale. [...]

Actually, the DB-20 is a preselector, and a nice one; during WW II, the USN used an awful lot of them to reduce LO radiation from their superhet receivers. (Early stealth technology!)

I'm tempted--my neighborhood is pretty electrically noisy. But I think I know someone who could use this even more, and has a "matching" receiver. Oh, Haaaaaank...?

73,
--Bobbi

From boatanchors@theporch.com Fri Apr 21 15:14:17 1995
Date: Fri, 21 Apr 1995 13:47:19 -0500
Message-Id: <m0s2Nga-0018NmC@aupair.cs.athabascau.ca>
From: tech@cs.athabascau.ca (Richard Loken)
Subject: free telephone type 66 connecting blocks

The company is tossing out fifty R-66-b3-50 telephone connecting blocks. These are the classic telco multipair connecting block where the wire is pushed between teeth that displace the insulation. When I worked for the Telco in 1971 these were the latest thing. The pins are in an array of 50 by 6 with the six columns split down the middle so they are tied together in groups of 3.

If any of you feel the need to setup a SXS or crossbar wire centre call now and I will fish some out of the trash for you. ESS wire centres are outside the boatanchors mandate. SPEAK QUICKLY, I AM NOT GOING TO PILE UP 50 66 BLOCKS IN THE OFFICE JUST IN CASE...

I took a couple but truthfully I can't think of a use for them.

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those
Athabasca University : tuques we wear, our heads
Athabasca, Alberta Canada : are naked!"
** tech@cs.athabascau.ca ** : - Aurthor Black

From boatanchors@theporch.com Fri Apr 21 16:58:27 1995
Date: Fri, 21 Apr 1995 15:26:32 -0500
Message-Id: <m0s2PE9-0018NpC@aupair.cs.athabascau.ca>
From: tech@cs.athabascau.ca (Richard Loken)
Subject: free to a good home: 832A vacuum tube

Tell me what you would do with it and I'll give it to you for postage.

Its cute but I don't need it.

Richard Loken VE6BSV, Systems Programmer - VMS : "...underneath those
Athabasca University : tuques we wear, our heads
Athabasca, Alberta Canada : are naked!"
** tech@cs.athabascau.ca ** : - Aurthor Black

From boatanchors@theporch.com Fri Apr 21 09:09:47 1995
Date: Fri, 21 Apr 1995 07:41:40 -0500
Message-Id: <2F97D17C@pcgateway.netrix.com>
From: cgould <cgould@netrix.com>
Subject: Jack's Book of LISTS

Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657/#1789 -- both all mobile! ;^)
- - - BoatAnchor Mailing List Archiver/Owner - - -
| Jack GF Hill |Voice: (615) 459-2636| Ham Call: W4PPT |
* P. O. Box 1685 |Modem: (615) 377-5980| Bicycling and SCUBA Diving *
| Brentwood, TN 37024|Fax: (615) 459-0038| Life Member - ARRL |
* listown@jackatak.theporch.com firebotl@jackatak.theporch.com *

Jack has said:

> ARLB042 Comm emergency declared
Please, please, please... NO ARRL Bulletins, no matter how relevent
the subject seems to you... Summarize it, or paraphrase it, but please
DO NOT POST ARRL BULLETINS on the Boatanchor list...

US Regulations and Amateur Policy. Do not prejudge my personal feelings, but this is not what people have subscribed here to read. We have far too many off-shore subscribers, that these discussions are misplaced and rude to those who don't live here...

Since I *really* hate loads of rules and restrictions, how about we turn this to positive and suggest topics that *ARE* appropriate:

Bone Yard Reports

- Equipment Lists (via the fileserver, of course!)
- Restoration and Repair Tips
- Specific equipment features, variations, and idiosyncrasies.
- Vacuum tube information.
- Sources for parts, data, etc.
- Books relating to boatanchors, etc.
- Hamfest announcements
- Magazine articles about Boatanchors
- Requests for technical assistance
- For sale postings
- Background info on manufacturers
- Test equipment
- Individual collection descriptions (some of those were very interesting!)

Boy for a minute there I thought I was in a non-democratic country... Well I sit here and I am speechless or wordless for a better term.

The effort of putting out the ARRL bulletin was put out for two reasons. One , the Dallas Field Office of the FCC was wanting max distribution so they could get compliance and have the frequencies vacated the last 2 nights.

Two, many whom are true BA'ers do have there equipment on the air and use those frequencies that was mentioned in the bulletin. The bulletin issued was not getting distributed widely and expeditiously enough both in this country and abroad. Since most us are AMATEUR RADIO OPERATORS, and Jack you being a LIFE MEMBER of the ARRL you should understand this more than anyone else, I took the opportunity to utilize a means of distribution in a time of an emergency. It was done solely in the sprite of AMATEUR RADIO , nothing more.

Jack Please remove me from your list. Since you do not promote the free expression and interchange of ideas in a fair way nor support AMATEUR RADIO in the sprite it has been for 50 years, I do not what to be associated with this group. I am disgusted with such a message I received from you. This is not a repeater nor is it a RF frequency. You do have free speech here and it is not bound by Part 97 of the communication act of 1934. Even though

it is a focus group
on the sale and service of vacuum tube type equipment you still should have
a heart. If this had been on the radio I would have had to check the dial to
make sure I wasn't on 3.898 or 14.313 .

73

Chuck N4YXW, Just a ham
SKSKSK ...- .--- . -. -.-

From boatanchors@theporch.com Fri Apr 21 20:35:09 1995
Date: Fri, 21 Apr 1995 19:08:23 -0500
Message-Id: <Pine.SUN.3.91.950421134545.12809A-1000000@kahuna>
From: Jeffrey Herman <jeffrey@math.hawaii.edu>
Subject: Re: Jack's Book of LISTS

Chuck and the Gang,
One thing to keep in mind is that everything we send to the list is
archived - a lot of historical data that is unavailable elsewhere is
being passed on here every day of the year and Jack has taken it upon
himself to make sure none of it is lost to the graveyard. Thus, he
certainly is justified in scolding us in order to keep the archives
down to an \$affordable\$ size. It would be too tedious for him to
selectively remove articles.

Those in the next century conducting research on early radio equipment
will be utilizing these archives and will be very thankful for Jack's
hard work (and his periodic scoldings!).

Note that the ARRL bulletins (DX, Propagation, Special) are available
via an email list. Danged if I can remember how I subscribed to it,
though.

73 from beautiful Hawaii,
Jeff NH6IL (ex WA6QIJ)

From boatanchors@theporch.com Fri Apr 21 13:39:13 1995
Date: Fri, 21 Apr 1995 12:12:22 -0500
Message-Id: <Pine.3.89.9504211111.B7386-0100000@indy2>
From: "Roberta J. Barmore" <rbarmore@indynet.indy.net>
Subject: Precision design, was Re: Attacking Tube Audio Geeks

Hi!

While I agree that the general drift of this thread is outside the

purview of the BA-list, it does bring up a notion that might be of use for us, especially in dealing with homebrewing, inherited homebrew gear, and the sorts of shuddersome user-mods frequently found in BA equipment that was just fine when it left the factory.

In "The Art Of Electronics" (which I have cited before--it's expensive but well worth owning, one of the **best** electronics texts in current print), there's a nice chapter on precision and low-noise design. In the **opening* paragraphs,** the authors note the tendency of many folks to "throw a few 1% metal-film resistors and stable capacitors at a circuit and call it precision design without careful consideration of the actual requirements and operating parameters of the design." (paraphrased from memory).

Elsewhere in this thread, I noticed a few examples of black magic and rumor invoked to explain the "differences" between tube and transistor sound. Silliness--you can get **any** sort of "sound" from a well-designed amplifier, no matter what the active devices are. Major contributors to subtle sonic differences are well-known, and include such simple but often-ignored factors as the proper choice of operating point for the active devices, appropriate understanding of any negative feedback used (this is the bane of many an amp, no matter if it is a brand new far-Eastern unit, some golden-ears superthing or the modulator of an old AM/BC rig converted to 160m), and understanding of the coupling methods and components between stages (for those who like transformer coupling, good units have been available since the 1930s; it was expensive then and it still is. Bad "iron" is quite often one of the main sources of that "warm tube sound," and contributes to the slew-rate limitations that are another of the sources). Do it right, you have a nice clean amp, no grit or coloration, and you'll hear what's wrong with the source or the transmission path--hang a crummy carbon mic on the converted BC rig and conduct QSOs in the midst of massive QRN/QRM, and it'll sound wretched, no matter how good the rig itself is.

What does that mean in re BAs? It means you need to think mods through **all** the way; a "SWAG" or something you heard worked okay for some other ham might be a starting point, but it needs to be worked out before plugging in the iron. **Not** doing so--grabbing a cookbook circuit and tacking it in, fiddling values 'til it sort of works, is precisely how nice old BAs get all hacked up and end up as parts units. Mysticism, hearsay and instinct all have their place...which isn't in electronics.

73,
--Bobbi

From boatanchors@theporch.com Fri Apr 21 09:37:40 1995
Date: Fri, 21 Apr 1995 08:10:22 -0500
Message-Id: <199504211303.JAA08347@gatekeeper.ddp.state.me.us>
From: afpgreg@gatekeeper.ddp.state.me.us (Paul V. Gregory)

Subject: Re: Quality control Russian tubes

>In my prior posting on tube quality control, I missed one VERY
>important point. You need a DEMANDING customer. Otherwise, there is
>no incentive for quality. (You also need competition.)

>

>Again, this is another problem of the command economy. The Russian TV
>set manufacturers probably also didn't care about quality, or if the
>tube lasted more than 100 hours. The consumers would buy any TV they
>could get their hands on. Their military was pickier, that's why the
>plants like Svetlana that fed the military are better.

Actually, during my first visit to Three-C P during the early 70's I was impressed with the high picture quality of Soviet colour television. As good as if not better than anything I'd seen in the west. The State had obviously applied some effort here and for good reason: TV was an important tool for the regime. I know that's not Q-C, but it did demonstrate to me the State's reasoning.

However on a more objective note, the largest cause of apartment fires in Moscow today is due to the spontaneous combustion of television sets--even when not turned on! Apparently they haven't gotten that "instant-on" feature squared away yet.

73--Paul

From boatanchors@theporch.com Fri Apr 21 18:18:46 1995

Date: Fri, 21 Apr 1995 16:52:07 -0500

Message-Id: <F4LG4718.F4LG4754@mail.admin.wisc.edu>

From: TOM.A.ADAMS@mail.admin.wisc.edu

Subject: Re. AM Windows

to: boatanchors@theporch.com

There's been MORE than a few comments here recently about whether or not there is such a thing as an "AM Window" on any band. I've heard SSB people scream on the air many times that the windows don't exist.

You wanna make 'em recognize the windows REAL quick? It's easy.

Just move OUTSIDE of the windows, and start calling CQ.

I guarantee you that within 10 seconds after you cut the plate, some mushmouth slop-bucketeer is gonna yell "WHY DON'T YOU TAKE THAT &%%*% THING BACK TO THE AM PORTION?" ; -)

Re. "gentlemen's agreements":

First of all, since Congress and the officer's corps of the military have been opened wide to the inclusion of women, the phrase "gentleman" is appropriate only when applied to specific individuals of the appropriate gender; i.e., the phrase "gentlemen's agreement" is rendered obsolete, as is "an officer and a gentleman".

I hate PC-TALK as much as the next guy, but I see this one as legitimate. The term is too uninclusive, in that it ignores the reality of the situation; the rules for getting a ham ticket don't include a genitalia test.

Second, I can't really call the windows a gentleperson's agreement; it's more a matter of courtesy on the part of AM ops.

We realize full well that slopbucket signals get blown away by hetrodynes. We just wanna operate without causing anyone else any problems. We realize that the SSB folks are in the majority, so we've essentially been nice about it and quietly ceded the majority of the ham spectrum to them.

The reaction from a lot of the slop bucketeers, in the form of catcalls and intentional jamming also tends to negate the characterization of a gentleman's agreement; you can only have a gentleman's agreemant when you're DEALING with gentlemen, and that sure as hell ain't the case with a lot of these clowns!

So much for my sermon. Soap box is put away.

Tom, K9TA (building a new, very large, AM rockcrusher)

From boatanchors@theporch.com Fri Apr 21 14:13:03 1995
Date: Fri, 21 Apr 1995 12:45:57 -0500
Message-Id: <0098F35C8D256A40.2061666E@mwk.com>
From: "Lee K. Gleason" <gleason@MWK.COM>
Subject: Seen in Fair Radio Catalog

I was just scanning the new Fair Radio catalog for BA receivers (Been reading 'em on and off for 25 years...they still use the same little pieces of clip art for some of the illustrations that they did in the first one I ever read...some things never change).

I saw that they had 51J3 receivers for around \$450.00, in "Used, checked" condition.

How does this rate as a receiver? And, how good a condition would one expect form Fair as "used, checked"?

Lee K. Gleason N5ZMR
Control-G Consultants
gleason@mwk.com

From boatanchors@theporch.com Fri Apr 21 13:11:42 1995
Date: Fri, 21 Apr 1995 11:44:51 -0500
Message-Id: <Pine.SUN.3.91.950421113411.16362A-1000000@eiger.ceet.niu.edu>
From: Steve Berg <berg@eiger.ceet.niu.edu>
Subject: Re: Special Message

Thanks for the tip. I will stay off these disaster frequencies until things quiet down. I do not otherwise monitor ARRL bulletins, so this is the only way I can get emergency notices.

73,

Steve WA9JML

From boatanchors@theporch.com Fri Apr 21 22:59:58 1995
Date: Fri, 21 Apr 1995 21:02:24 -0500
Message-Id: <9504211805.AA18310@jkhhome.network23.com>
From: john@jkhhome.network23.com (John King)
Subject: Svetlana 833's

To interject another data point into the imported-vs-domestic tube discussion...

One of the hats I wear is that of contract engineer for AM and FM broadcast radio stations. One of the stations I work for uses an old Gates BC1G one kilowatt AM transmitter that has a pair of 833's in the final modulated by a pair of 833's. The station is a daytimer, so the average broadcast day is appx 10 hours. I have been using Chinese 833's for the last several years in this xmtr, and the finals tend to last a year while the modulators last about 6 months. The failure modes generally are low emission in the mod tubes, while the finals fail due to loss of control grid authority caused by contamination within the tube. This shakes out to around 1800 hours for the mod tubes and 3600 hours for the finals.

I just received 4 new Svetlana 833's that will be installed in the BC1G this weekend. Svetlana backs these tubes with a 5,000 hour warranty. I'm a little unclear on the exact terms of the warranty. The factory order sheet gives it as 500 hours full replacement pro rated to 5,000 hours, while the warranty sheet in the box with each tube seems to imply full 5,000 hour replacement.

The Svetlana 833's are beautifully made tubes... to say they're a work of art might be stretching it, but that was my first impression as I inspected one. The tubes come well packed in relatively compact boxes, and each contains the warranty registration card and a data sheet. Each tube is tested at the factory. The internal construction is vastly superior to the Chinese tubes... so much so that the Chinese tubes just look like junk by comparison. I will have the opportunity to compare an original RCA tube to the Ukraine tubes this weekend, and I will follow up to the BA list with a comparison of the construction of the original RCA, the Chinese, and the Svetlanas. I'll also try to keep you all posted on the service life of the Svetlanas.

More later... 73,

John King WA1ABI

From boatanchors@theporch.com Fri Apr 21 18:15:05 1995
Date: Fri, 21 Apr 1995 16:48:29 -0500
Message-Id: <2F982741@msmail.oafb.af.mil>
From: "Lazaroff, Michael S., MSgt" <LAZAROMS@quasar.oafb.af.mil>
Subject: SX-25

Hi gang,

Yesterday, I was given a Hallicrafters SX-25. It appears to be complete and in reasonably good condition, considering its age, etc.

While I work on cleaning it up a bit, does anyone have a manual, schematic, etc., that they'd be willing to either part with or copy? I'll gladly cover any reasonable costs.

This will be my spring/summer BA project!

Thanks and 73,

Mike KB3RG

From boatanchors@theporch.com Fri Apr 21 09:16:31 1995
Date: Fri, 21 Apr 1995 07:49:15 -0500
Message-Id: <Chameleon.950421081932.morinv@nbnet.nb.ca>
From: morinv@nbnet.nb.ca (Victor Morin)

Subject: Tender Love and Care

Dear Boatanchor people,

I'm new to this list and I'm also new to boatanchoring. I need your advice.

I'm proud as a peacock because I've recently acquired a US Army surplus Collins KWM-2A. So far I've only had to replace a rotted line cord and a couple of electrolytics that looked suspect. Everything works well on receive - I have yet to test out the XMTR section due to the lack of a dummy load.

I obviously want to keep my new-to-me rig in tip-top shape, which begs the following

question: Am I better off to leave the rig on constantly in order to preserve the filaments, or should I turn off the rig every time I'm done using it? In other words,

does the inrush current into a cold filament do it more harm than the tungsten evaporation that will occur if the rig is left on all the time?

TIA,

Vic VE9ABC

From boatanchors@theporch.com Fri Apr 21 11:55:33 1995
Date: Fri, 21 Apr 1995 10:28:35 -0500
Message-Id: <Pine.3.89.9504210828.A25279-01000000@netcom17>
From: paul Veltman <veltman@netcom.com>
Subject: Re: Tender Love and Care

Vic and friends,

Congratulations on your KWM2A. They are nice rigs indeed. It is my OPINION that there is no significant improvement in tube life earned by leaving the heaters on constantly given the sporadic use in ham service. If this were a commercial installation where the rig was used constantly, perhaps leaving it on would help some, but I'm not convinced.

73

Paul WA6OKQ

From boatanchors@theporch.com Fri Apr 21 13:30:08 1995
Date: Fri, 21 Apr 1995 12:02:56 -0500
Message-Id: <m0s2ARv-000E4uC@dorite.iquest.net>
From: jcaldwel@dorite1.iquest.net (James Caldwell)
Subject: What is allowed?

Hello to the members if this list and it's moderator.

I have had an interest in old and antique radios since my youth and have funtionally restored an upright Zenith radio and several of the desktop AM tube Zenith radios to working condition.

What other than discussions about boat anchors are allowed?

Can I list what old radio parts I might have?

James

From boatanchors@theporch.com Fri Apr 21 23:09:45 1995
Date: Fri, 21 Apr 1995 20:43:06 -0500
Message-Id: <m0s2U9K-000E3yC@dorite.iquest.net>
From: jcaldwel@dorite1.iquest.net (James Caldwell)
Subject: Re: What is allowed?

johnb@thelair.zynet.com wrote:

>
>
> Sure! list away!
> /john

I have a box of about 10 multivibrators that need a good home.

From boatanchors@theporch.com Fri Apr 21 12:11:00 1995
Date: Fri, 21 Apr 1995 10:44:04 -0500
Message-Id: <Pine.SUN.3.91.950421083813.16929A-100000@haus.efn.org>
From: Gene Williamson <genewill@efn.org>
Subject: WTB: Variac

Looking for a small 120VAC Variac to be used re-forming caps on receiver and 50w transmitter. Cosmetics not nearly as important as price. I'm in Eugene, Oregon if shipping is a consideration. TU!

73 Gene K7dBV genewill@efn.org